Q.1 A, B and C were partners sharing profits in the ratio of 1/2, 2/5 and 1/10. Find the new ratio of the remaining partners if C retires.

The solution for this question is as follows:

Old Ratio A: B: C = 1/2: 2/5: 1/10 or 5: 4: 1

Since there is no information on how A and B acquired C's profit share after his retirement. So, A and B new profit-sharing ratio will be evaluated by crossing out C's share.

A's share = 1/2 X 5/5 = 5/10

B's share = 2/5 X 2/2 = 4/10

Therefore, the new profit ratio of A: B will be 5: 4

Q.2 From the following particulars, calculate the new profit-sharing ratio of the partners:

(a) Shiv, Mohan and Hari were partners in a firm sharing profits in the ratio of 5: 5: 4. Mohan retired and his share was divided equally between Shiv and Hari.

(b) P, Q and R were partners sharing profits in the ratio of 5: 4: 1. P retires from the firm.

The solution for this question is as follows:

(a) Old Ratio Shiv: Mohan: Hari = 5: 5 :4

The profit share of Mohan = 5/14
Mohan share equally divided between Shiv and Hari 1: 1

Mohan share taken by Shiv = 5/14 X 1/2 = 5/28
Mohan share taken by Hari = 5/14 X 1/2 = 5/28

New Profit Share = Old profit share + Shares taken by Mohan

Shiv's new share = 5/14 + 5/28 = 10+5/28 = 15/28
Hari's new share = 4/14 + 5/28 = 8+5/28 = 13/28

Shiv and Hari new profit ratio = 15: 13

(b) P: Q: R old share 5: 4: 1

P's profit share 5/10

Since, no information on how Q and R acquired P's profit share after his retirement, so Q and R new profit-sharing ratio is evaluated just by crossing out P's share.

Therefore, New Profit Ratio Q: R = 4:1

Q.3 R, S and M are partners sharing profits in the ratio of 2/5, 2/5 and 1/5. M decides to retire from the business and his share is taken by R and S in the ratio of 1: 2. Calculate the new profit-sharing ratio.

The solution for this question is as follows:

Old Ratio R: S: M = 2: 2: 1

M retires from the company.

M's profit share = 1/5
R's and S's share taken by M in ratio 1: 2

Share taken by R = 1/5 X 1/3 = 1/15
Share taken by S= 1/5 X 2/3 = 2/15

New Ratio = Old Ratio + Share taken from M

R's new share = 2/5 + 1/15 = 6+1/15 = 7/15
S's new share = 2/5 + 2/15 = 6+2/15 = 8/15

R and S new profit ratio = 7: 8

Q. 4 A, B and C were partners sharing profits in the ratio of 4: 3 : 2. A retires, assuming B and C will share profits in the ratio of 2 : 1. Determine the gaining ratio.

Solution:

Old ratio A: B: C = 4: 3: 2

New ratio B: C = 2: 1

Gaining ratio = New ratio – Old ratio

B's Gaining ratio = 2/3 – 3/9 = 6/9 – 3/9 = 3/9

C's Gaining ratio = 1/3 – 2/9 = 3/9 – 2/9 = 1/9

So, Gaining ratio B : C = 3 : 1

Q.5 X, Y and Z are partners sharing profits in the ratio of 1/2, 3/10, and 1/5. Calculate the gaining ratio of remaining partners when Y retires from the firm.

The solution for this question is as follows:

Old ratio X: Y: Z = 1/2 : 3/10 : 1/5 = 5:3:2/10

After Y's retirement the ratio of X and Z would be 5 : 2

Gaining ratio = New ratio – Old ratio

X's Gaining ratio = 5/7 – 5/10 = 15/70

Z's Gaining ratio = 2/7 – 2/10 = 6/70

Gaining ratio of X and Z will be = 15/70 : 6/70 = 15:6/70 or 5: 2

Q.6 (a) W, X, Y and Z are partners sharing profits and losses in the ratio of 1/3, 1/6, 1/3 and 1/6 respectively. Y retires and W, X and Z decide to share the profits and losses equally in future.

Calculate gaining ratio.

(b) A, B, and C are partners sharing profits and losses in the ratio of 4: 3: 2. C retires from the business. A is acquiring 4/9 of C's share and balance is acquired by B. Calculate the new profit-sharing ratio and gaining ratio.

The solution for this question is as follows:

(a) Old ratio W: X: Y: Z = 1/3 : 1/6 : 1/3 : 1/6 or 2: 1: 2: 1

New ratio W: X: Z = 1: 1: 1

Gaining ratio = New ratio – Old ratio

W's Gaining ratio = 1/3 – 2/6 = 2−2/6 = 0
X's Gaining ratio = 1/3 – 1/6 = 2−1/6 = 1/6
Z's Gaining ratio = 1/3 – 1/6 = 2−1/6 = 1/6

So, Gaining ratio = 0: 1: 1

(b) Old Ratio A: B: C = 4 : 3 : 2

Profit Share of C's = 2/9 4/9 of C's share is acquired by A and the left share is acquired by B

A acquired share = 2/9 X 4/9 = 8/81

B acquired share = C's share – Share acquired by A

= 2/9 – 8/81 = 10/81

A's new share = 4/9 + 8/81 = 3/6+8/81 = 44/81
B's new share = 3/9 + 10/81 = 2/7+10/81 = 37/81

So, A and B new ratio will be = 44: 37

Gaining ratio = New ratio – Old ratio

A's Gaining ratio = 44/81 – 4/9 = 44−36/81 = 8/81
B's Gaining ratio = 37/81 – 3/9 = 37−27/81 = 10/81

So, gaining ratio will be = 8: 10 or 4: 5

Q.7 Kumar, Lakshya, Manoj and Naresh are partners sharing profits in the ratio of 3 : 2 : 1 : 4. Kumar retires and his share is acquired by Lakshya and Manoj in the ratio of 3 : 2. Calculate new profit-sharing ratio and gaining ratio of the remaining partners.

The solution for this question is as follows:

3/10 of Kumar's share acquired by Lakshya and Manoj in 3: 2 ratio

Lakshya acquired share = 3/10 X 3/5 = 9/50
Manoj acquired share = 3/10 X 2/5 = 6/50
Lakshya new share = 2/10 + 9/50 = 19/50
Manoj new share = 1/10 + 6/50 = 11/50
Naresh retained share = 4/10 or 20/50
The new profit sharing ratio between Manoj, Lakshya, and Naresh will be 19: 11: 20

Q.8 A, B, and C were partners in a firm sharing profits in the ratio of 8 : 4 : 3. B retires and his share is taken up equally by A and C. Find the new profit-sharing ratio

The solution for this question is as follows:

Old Ratio A: B: C = 8: 4 : 3

B retires from the firm and his profit share is = 4/15

A and C took B's share in 1: 1 ratio

A acquired share = 4/15 X 1/2 = 4/30 = 2/15
C acquired share = 4/15 X 1/2 = 4/30 = 2/15

New Ratio = Old ratio + Share acquired from B

A's new share = 8/15 + 2/15 = 10/15

B's new share = 3/15 + 2/15 = 5/15

New profit-sharing ratio between A and C is 10/15: 5/15 or 2: 1

Q.9 A, B, and C are partners sharing profits in the ratio of 5 : 3 : 2. C retires and his share is taken by A. Calculate new profit-sharing ratio of A and B.

The solution for this question is as follows:

Old Ratio A: B: C = 5 : 3 : 2

C retires from the firm and profit share is 2/10

A acquires entire C's share

New Ratio = Old Ratio + Share acquired from C

A's new ratio = 5/10 + 2/10 = 7/10

B's = 3/10

So, the new ratio between A: B will be 7: 3

Q.10 P, Q and R are partners sharing profits in the ratio of 7 : 5 : 3. P retires and it is decided that the profit-sharing ratio between Q and R will be the same as existing between P and Q. Calculate New profit-sharing ratio and Gaining Ratio.

The solution for this question is as follows:

Old Ratio = P: Q : R = 7: 5: 3

New ratio between Q: R = 7: 5

Gaining Ratio = New Ratio – Old Ratio

Q's Gaining ratio = 7/12 – 5/15 = 35–20/60 = 15/60
R's Gaining ratio = 5/12 – 3/15 = 25−12/60 = 13/60

So, Gaining ratio will be = 15: 13

Q.11 Murli, Naveen and Omprakash are partners sharing profits in the ratio of 3/8, 1/2 and 1/8. Murli retires and surrenders 2/3rd of his share in favour of Naveen and remaining share in favour of Omprakash. Calculate new profit-sharing ratio and gaining ratio of the remaining partners.

The solution for this question is as follows:

Old Ratio=3: 4: 1

Murali's retires with share 3/8

2/3 share is surrendered by Murli in the favour of Naveen

Naveen acquired share = 3/8 X 2/3 = 2/8

Remaining share acquired by Omprakash = 3/8 – 2/8 = 1/8

Gaining ratio = 2/8 : 1/8 = 2:1

New Ratio = Old ratio + Share acquired from B

Naveen new share = 4/8 + 2/8 = 6/8

Omprakash new share = 1/8 + 1/8 = 2/8

New profit sharing ratio between Naveen and Omprakash will be 6/8 : 2/8 = 3: 1

Q.12 A, B and C are partners in a firm sharing profits and losses in the ratio of 4 : 3 : 2. B decides to retire from the firm. Calculate new profit-sharing ratio of A and C in the following circumstances:

(a) If B gives his share to A and C in the original ratio of A and C.

(b) If B gives his share to A and C in equal proportion.

(c) If B gives his share to A and C in the ratio of 3 : 1.

(d) If B gives his share to A only.

Solution:

Old Ratio A: B: C = 4 : 3 : 2

B retires from the firm and his profit share is = 3/9

(a) If B gives his share to A and C in the original ratio of A and C

Original ratio A : C = 4 : 2

A acquired share = 3/9 X 4/6 = 12/54
C acquired share = 3/9 X 2/6 = 6/54

New ratio = Old ratio + Share acquired from B

A's new share = 4/9 + 12/54 = 24+12/54 = 36/54
C's new share = 2/9 + 6/54 = 12+6/54 = 18/54

New profit sharing ratio between A and C = 36/54 : 18/54 or 2: 1

(b) If B gives his share to A and C in equal proportion

A acquired share = 3/9 X 1/2 = 3/18
C acquired share = 3/9 X 1/2 = 3/18

New ratio = Old ratio + Share acquired from B

A's new share = 4/9 + 3/18 = 8+3/18 = 33/54
C's new share = 2/9 + 3/18 = 4+3/18 = 7/18

New profit-sharing ratio between A and C = 11: 7

(c) If B gives his share to A and C in the ratio of 3 : 1

A acquired share = 3/9 X 3/4 = 9/36
C acquired share = 3/9 X 1/4 = 3/36

New ratio = Old ratio – Share acquired from B

A's new share = 4/9 + 9/36 = 16+936 = 25/36
C's new share = 2/9 + 3/36 = 8+3/36 = 11/36

New profit sharing ratio between A and C = 25 : 11

(d) If B gives his share to A only

A's new share = Old share of A + Share of B

= 4/9 + 3/9 = 7/9
C's new share = 2/9
New profit sharing ratio between A and C = 7 : 2

Q.13 L, M and O are partners sharing profits and losses in the ratio of 4 : 3 : 2. M retires and the goodwill is valued at ₹ 72,000. Calculate M's share of goodwill and pass the Journal entry for Goodwill. L and O decided to share the future profits and losses in the ratio of 5 : 3.

The solution for this question is as follows:

Journal				
Particulars		**L.F.**	**Debit ₹**	**Credit ₹**
L's Capital A/c	Dr.		13,000	
O's Capital A/c	Dr.		11,000	
To M's Capital A/c (Being adjustment of M's goodwill share)				24,000

Working Note 1: Gaining Ratio Evaluation

Old Ratio L : M : O = 4 : 3 : 2

M retires from the firm

New Ratio between L : O = 5 : 3

Gaining Ratio
= New Ratio − Old Ratio

L's share = 5/8 – 4/9 = 45−32/72 = 13/72
O's share = 38 – 29 = 27−16/72 = 11/72
Gaining ratio between L and O = 13: 11

Working Note 2: Goodwill Evaluation

Firm's Goodwill = ₹ 72,000

M's goodwill= 72,000 X 3/9 = ₹ 24,000

This goodwill share will be debited from remaining Partners' Capital A/c in 13: 11 gaining ratio

Debited amount from L's Capital A/c = 24,000 X 13/24 = ₹ 13,000

Debited amount from O's Capital A/c = 24,000 X 11/24 = ₹ 11,000

Question 14 P, Q, R and S were partners in a firm sharing profits in the ratio of 5 : 3 : 1 : 1. On 1st January, 2019, S retired from the firm. On S's retirement, goodwill of the firm was valued at ₹ 4,20,000. New profit-sharing ratio among P, Q and R will be 4 : 3 : 3.

Showing your working notes clearly, pass necessary Journal entry for the treatment of goodwill in the books of the firm on S's retirement.

The solution for this question is as follows:

Journal					
Date	**Particulars**		**L.F.**	**Debit ₹**	**Credit ₹**
1st Jan.	R's Capital A/c	Dr.		84,000	
	To P's Capital A/c				42,000
	To S's Capital A/c				42,000
	(Being goodwill adjusted)				

Working Notes 1: Gaining Ratio Evaluation

Gaining Ratio = New Ratio – Old Ratio

P's share = 4/10 – 5/10 = – 1/10 (Sacrificing)
Q's share = 3/10 – 3/10 = 0
R's share = 3/10 – 1/10 = 2/10

Working Note 2: Goodwill Evaluation

P's Goodwill share = 4,20,000 X 1/10 = ₹ 42,000
Q's Goodwill share = 4,20,000 X 2/10 = ₹ 84,000
R's Goodwill share = 4,20,000 X 1/10 = ₹ 42,000

Q.15 Aparna, Manisha and Sonia are partners sharing profits in the ratio of 3 : 2 : 1. Manisha retired and the goodwill of the firm is valued at ₹ 1,80,000. Aparna and Sonia decided to share future profits in the ratio of 3 : 2. Pass necessary Journal entries.

The solution for this question is as follows:

	Journal				
Date	**Particulars**		**L.F.**	**₹**	**₹**
	Aparna's Capitals A/c	Dr.		18,000	
	Sonia's Capital A/c	Dr.		42,000	
	To Manisha's Capital A/c				60,000
	(Being Manisha's goodwill share adjusted to Aparna's and Sonia's Capital A/c as per their gaining ratio)				

Working Notes 1: Manisha's Goodwill Share Evaluation

Manisha's share = Firm's Goodwill X Manisha's Profit Share

Manisha's share=1,80,000 X 1/3 = ₹ 60,000
Working Notes 1: Gaining Ratio Evaluation

Gaining ratio = New Ratio – Old Ratio

Arpana's gain = 3/5 – 3/6 = 3/10
Sonia's gain = 2/5 – 1/6 = 7/30
Gaining ratio = 3:7

Working Note 2: Goodwill Evaluation

Arpana's Goodwill share = 60,000 X 3/10 = ₹ 18,000
Sonia's Goodwill share = 60,000 X 7/10 = ₹ 42,000

Q.16 A, B and C are partners sharing profits in the ratio of 3 : 2 : 1. B retired and the new profit-sharing ratio between A and C was 2 : 1. On B's retirement, the goodwill of the firm was valued at ₹ 90,000. Pass necessary Journal entry for the treatment of goodwill on B's retirement.

The solution for this question is as follows:

Journal				
Particulars		**L.F.**	**Debit ₹**	**Credit ₹**
A's Capital A/c	Dr.		15,000	
C's Capital A/c	Dr.		15,000	
To B's Capital A/s				30,000
(Being adjustment made on B's goodwill share)				

Working Notes 1: Gaining Ratio Evaluation

Old Ratio A: B: C = 3 : 2 : 1

B retires from the firm.

New Ratio A : C = 2 : 1

Gaining Ratio = New Ratio − Old Ratio

A's share = 2/3 – 3/6 = 4−3/ 6 = 16
C's share = 13 – 16 = 2−16 = 16
Gaining ratio = 1:1

Working Notes 2 : Goodwill Adjustment

Form Goodwill = ₹ 90,000

B's Goodwill share = 90,000 X 2/6 = ₹ 30,000

This goodwill share will be debited from remaining Partners' Capital A/c in 1:1 gaining ratio

Debited amount from A's Capital A/c = 30,000 X 12 = ₹ 15,000

Debited amount from C's Capital A/c = 30,000 X 12 = ₹ 15,000

Q.17 Hanny, Pammy and Sunny are partners sharing profits in the ratio of 3 : 2 : 1. Goodwill is appearing in the books at a value of ₹ 60,000. Pammy retires and at the time of Pammy's retirement, goodwill is valued at ₹ 84,000. Hanny and Sunny decided to share future profits in the ratio of 2 : 1. Record the necessary Journal entries.

The solution for this question is as follows:

Journal

Date	Particulars		L.F.	Debit ₹	Credit ₹
	Hanny's Capital A/c	Dr.		30,000	
	Pammy's Capital A/c	Dr.		20,000	
	Sunny's Capital A/c			10,000	
	To Goodwill A/c				60,000
	(Being written-off old goodwill in old ratio)				
	Hanny's Capital A/c	Dr.		14,000	
	Sunny's Capital A/c	Dr.		14,000	
	To Pammy's Capital A/c				28,000
	(Being goodwill adjustment in gaining ratio)				

Working Notes 1: Pammy's Goodwill Share Evaluation

Pammy's share = Goodwill of the firm X Pammy's Profit Share

= 84,000 X 2/6 = ₹ 28,000 (to be borne by gaining partners in gaining ratio)

Working Notes 2: Gaining Ratio Evaluation

Harry's gaining ratio = 3/5 – 3/6 = 1/6

Sunny's gaining ratio = 1/3 – 1/6 =1/6

Gaining Ratio = 1:1

Q.18 X, Y and Z are partners sharing profits in the ratio of 3 : 2 : 1. Goodwill is appearing in the books at a value of ₹ 60,000. Y retires and at the time of Y's retirement, goodwill is valued at ₹ 84,000. X and Z decided to share future profits in the ratio of 2 : 1. Pass the necessary Journal entries through Goodwill Account.

The solution for this question is as follows:

Journal					
Date	**Particulars**		**L.F.**	**Debit ₹**	**Credit ₹**
	X's Capital A/c	Dr.		30,000	
	Y's Capital A/c	Dr.		20,000	
	Z's Capital A/c	Dr.		10,000	
	To Goodwill A/c Being goodwill written off)				60,000
	X's Capital A/c	Dr.		14,000	
	Z's Capital A/c	Dr.		14,000	28,000
	To Y's Capital A/c				28,000
	(Being goodwill adjustment of Y)				

Working Notes 1 : Gaining Ratio Evaluation

Old Ratio X : Y : Z = 3 : 2 : 1

New Ratio X : Z = 2 : 1

Gaining Ratio = New Ratio – Old Ratio

X's gaining ratio = 2/3 – 3/6 = 1/6
Z's gaining ratio = 1/3 – 1/6 = 1/6
Gaining ratio of X and Z = 1 : 1

Working Notes 2 : Goodwill Share Evaluation in 3:2:1 ratio

X's share of goodwill=84,000 x 3/6 = ₹ 42,000
Y's share of goodwill=84,000 x 2/6 = ₹ 28,000
Z's share of goodwill=84,000 x 1/6 = ₹ 14,000

Working Notes 3: Retiring Partner's Goodwill Share Evaluation

X and Z will acquire the goodwill share of Y in 2 :1 gaining ratio

Debited amount from X's Capital A/c = 84,000 X 2/3 = ₹ 56,000
Debited amount from Z's Capital A/c = 84,000 X 1/3 = ₹ 28,000

Q.19 A, B and C are partners sharing profits in the ratio of 49 : 39 : 29. B retires and his capital after making adjustments for reserves and gain (profit) on revaluation stands at ₹ 1,39,200. A and C agreed to pay him ₹ 1,50,000 in full settlement of his claim. Record necessary Journal entry for adjustment of goodwill if the new profit-sharing ratio is decided at 5: 3.

The solution for this question is as follows:

<table>
<tr><th colspan="6">Journal</th><th></th></tr>
<tr><th>Date</th><th>Particulars</th><th></th><th>L.F.</th><th>Debit ₹</th><th>Credit ₹</th></tr>
<tr><td></td><td>A's Capital A/c</td><td>Dr.</td><td></td><td>5,850</td><td></td></tr>
<tr><td></td><td>C's Capital A/c</td><td>Dr.</td><td></td><td>4,950</td><td></td></tr>
<tr><td></td><td>To B's Capital A/c</td><td></td><td></td><td></td><td>10,800</td></tr>
<tr><td></td><td>(Being goodwill adjustment of B)</td><td></td><td></td><td></td><td></td></tr>
</table>

Working Notes 1:

B's Goodwill Share Evaluation

Profit sharing ratio of A: B: C = 4/9 : 3/9 : 2/9
B retires from the firm and other partners agreed to pay him ₹ 1,50,000

After making necessary adjustments B's capital amounting ₹1,39,200

Hidden goodwill = 1,50,000 – 1,39,200 = ₹ 10,800

Working Notes 2 : Gaining Ratio Evaluation

New profit sharing ratio between A : B is 5 : 3

Gaining Ratio = New Ratio – Old Ratio

A's gaining ratio = 5/8 – 4/9 = 13/72
C's gaining ratio = 3/8 – 2/9 = 11/72

Gaining ratio of A and C= 13 : 11

Working Notes 3: B's Goodwill Share Evaluation

A and C will acquire the goodwill share of B in 13 :11 gaining ratio

Debited amount from A's Capital A/c = 10,800 X 13/24 = ₹ 5,850
Debited amount from C's Capital A/c = 10,800 X 11/24 = ₹ 4,950

Q.20 M, N and O are partners in a firm sharing profits in the ratio of 3 : 2 : 1. Goodwill has been valued at ₹ 60,000. On N's retirement, M and O agree to share profits equally. Pass the necessary Journal entry for treatment of N's share of goodwill.

The solution for this question is as follows:

Journal					
Date	**Particulars**		**L.F.**	**Debit ₹**	**Credit ₹**
	O's Capital A/c	Dr.		20,000	
	To N's Capital A/c				20,000
	(Being adjustment of N's goodwill share)				

Working Notes 1 : Gaining Ratio Evaluation

Old Ratio M : N : O = 3 : 2 : 1

New Ratio M : O =1:1

Gaining Ratio = New Ratio – Old Ratio

M's gaining ratio = 1/2 – 3/6 = 3−3/6 = 0
O's gaining ratio = 1/2 – 1/6 = 3−1/6 = 2/6

Gaining ratio is only received by O in 2/6 ratio

Working Notes 2 : Retiring Partner's Goodwill Share Evaluation

Goodwill share of N = 60,000 X 2/6 = ₹ 20,000

N's share of goodwill will be brought by O only.

So, only O's Capital Account will be debited with ₹ 20,000